DOCUMENT RESUME

ED 050 376 CG 006 377

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TITLE Assessment of Air Force Accessions by

Draft-Vulnerability Category.

INSTITUTION Air Porce Human Resources Lab., Lackland AFB, Tex.

REPORT NO APHRL-TR-71-10

PUB DATE Mar 71 NOTE 21p.

EDRS PRICE EDRS Price MF-\$0.65 HC-\$3.29

DESCRIPTORS *Aptitude, *Enlisted Men, *Individual

Characteristics, Individual Ditferences, Hilitary Air Facilities, *Military Personnel, *Military Service, Performance, Performance Factors

ABSTRACT

This work assesses the characteristics of current Air Porce accessions. On the basis of draft lottery numbers, four groups of basic trainees enlisting in early 1970 were defined in terms of their draft vulnerability at the time of enlistment. These groups, designated as high, moderate, low, and no threat, were compared on a number of dimensions. Compared to the other groups, the test performance of the low-threat group was somewhat lower. In addition, there were significant differences between the no-threat group, the other groups, and the total group. In various comparisons on test performance, there were marked differences between racial and enlistment region subgroups, but only moderate differences within draft-threat groups. The data suggest that under zero-draft conditions, manpower resources at the higher aptitude levels may be more limited than is presently the case. (Author/TL)



AIR FORCE

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ED050376

ASSESSMENT OF AIR FORCE ACCESSIONS BY DRAFT-VULNERABILITY CATEGORY

Ву

Bart M. Vitola Lonnie D. Valentine, Jr.

PERSONNEL DIVISION Lackland Air Force Base, Texas

March 1971

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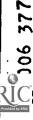
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FOREWORD

This work was conducted under Project 7719, Research and Development on Reliability, Adaptability, and Effectiveness of Air Force Personnel; Task 771908, Factors Related to Effective Utilization of Personnel Selection Procedures and of Selection Systems.

This report has been reviewed and is approved.

George K. Patterson, Colonel, USAF Commander



ABSTRACT

As the Armed Forces move toward a zero-draft force, assessment of the characteristics of current Air Force accessions becomes necessary. While the Air Force has relied upon voluntary enlistments to maintain its force strength, it has been recognized that many young men who enlist are motivated to do so by the prospect of being drafted. On the basis of draft lottery number, four groups of basic trainees enlisting during the first six months of 1970 were defined in terms of their draft vulnerability at the time of enlistment. These groups, designated as high, moderate, low, and no threat, were compared on a number of dimensions. Compared to the other groups and to the total group, the test performance of the low-threat group was somewhat lower. In addition, there were significant differences between the no-threat group, the other groups, and the total group. In various comparisons on test performance, there were marked differences between racial and enlistment region subgroups, but only moderate differences within draft-threat groups. The data suggest that under zero-draft conditions manpower resources at the higher aptitude levels may be more limited than is presently the case.



SUMMARY

Vitola, B.M. & Valentine, L.D., Jr. Assessment of Air Force accessions by draft-vulnerability category. AFHRL-TR-71-10. Lackland AFB, Tex.: Personnel Division, Air Force Human Resources Laboratory, March 1971.

Problem

Although the United States Air Force currently relies on voluntary enlist— 's to meet specialty quotas, it is generally accepted that many enlistees are motivated to enter the Air Force by the prospect of being drafted. As the services move toward a zero-draft situation, it becomes important to consider the numbers and characteristics of young mer who can be expected to volunteer in the absence of the draft. In this study, the accessions for January through June 1970 were divided into subsamples in terms of their draft vulnerability at the time of enlistment. Comparisons of these groups provide some basis for estimating the characteristics of a zero-draft force.

Approach

Data were collected on 32,269 basic trainees who entered the Air Force after January 1, 1970, the implementation date of the Selective Cervice Lottery System. Data on each basic trainee included Armed Forces Qualification Test (AFQT) and Airman Qualifying Examination (AQE) scores, date of birth, geographic area of enlistment, race, years of schooling, and draft lottery number. The subjects were classified into four draft-threat groups on the basis of their draft lottery numbers. Those with numbers 1 through 122 were considered the high-threat group, those with numbers 123 through 244 the moderate-threat group, and those with numbers 245 through 366 the low-threat group. Subjects who were not yet eligible for the draft when they enlisted constituted a draft non-eligible, or no-threat, group. The four groups were compared on educational, regional, racial, and test performance variables.

Results

The distribution of accessions for the first six months of 1970 indicated that 35 percent of the enlistees represented the high-threat group, while 10 percent were in the low-threat group. Distributions in terms of educational background revealed fewer accessions with 13 through 15 years of formal education in the low-threat group than in the high-threat group. Fifteen percent of the no-threat group had completed no more than 11 years of school. Racial subgroup distributions showed 17 and 16 percent Negroes in the low-threat and no-threat groups, respectively, compared to 11 percent in the high-threat group.

Compared with the high-threat group, the low-threat group showed moderately lower test performance. There were significant differences in test performance between the no-threat group, the other groups, and the total group. Performance of the no-threat group was significantly lower than that of the other groups. There were 'so marked racial differences in average AFQT scores and AQE aptitude indexes. For the Negro subgroup, proportionately fewer airmen scored within the high aptitude ranges. Comparsion of test performance for racial subgroups across geographic areas of enlistment consistently revealed some moderate differences. The decrease in average test performance with decreasing draft-threat which was observed overall was also present in the separate geographic samples.

Conclusions

The pattern of accessions across lottery groupe appears to support the hypothesis of uraft-motive ad enlistment. A basic assumption of the study was that characteristics of the low-threat and no-threat groups would apply similarly to personnel who could be expected to enlist in the Air Force in the absence of draft pressure. If such an assumption is tenable, it appears that the manpower resources to fill high-aptitude enlistment quotas may be somewhat more limited in a zero-draft force than is presently the case. Results of the study further suggest a modest increase in the proportion of Negroes under zero-draft conditions. In addition, it is suggested that proportionately fewer enlistees will have completed from 13 through 15 years of education. Implications of these findings include possible need for modification of minimum aptitude requirements for some technical courses and revision of some training curricula to accommodate lower aptitude personnel.

This summary was prepared by B. M. Vitola, Personnel Systems Branch, Personnel Division, Air Force Human Resources Laboratory.



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ASSESSMENT OF AIR FORCE ACCESSIONS BY DRAFT-VULNERABILITY CATEGORY

I. INTRODUCTION

As the Armed Forces move toward a zero-draft force composition, it becomes necessary for the services to determine the characteristics of the men most likely to enlist in the absence of draft pressure. Currently, the Unit-1 States Air Force relies on voluntary enlistments to meet Air Force specialty quotas, but it is recognized that a significant number of young men who enlist are motivated to do so by the prospect of being drafted.

A basic concern in the investigation of problems related to a volunteer force is objective definition of the self-motivated, or "true," volunteer. In previous studies relating to voluntary enlistment, first-term personnel have been admin istered attitude surveys; respondents who stated they definitely or probably would have enlisted in the absence of a draft have been identified as true volunteers. The use of an attitude survey to determine what a respondent would do or would have done in a hypothetical situation has certain limitations, however. Questions relating to attitudes and probable behavior often produce a dissonance which causes subjects to render threatreducing responses. Furthermore, there are often marked inconsistencies between what a person says he will do in a hypothetical situation and what the objective record reveals.

In January 1970, the Selective Service Lottery System became operational. Under provisions of the system, numbers are drawn to assign an ordinal position from 1 through 366 to each day of the year. According to the number drawn for their birth date, draft-eligible young men, ages 19 through 26 years, can estimate whether they are almost certain to be drafted, likely to be drafted, or likely not to be drafted.

An underlying assumption of the present study was that you 3 men who are not likely to be drafted but who, nevertheless, enlist in the Air Force are representative of the young men who would voluntarily enlist in the military services in the absence of draft pressure. Draft lottery number provides a new criterion by which draft vulnerability and, implicitly, perceived disf threat can be estimated. In this study, draft lottery sequence formed the basis for dividing enlistees into groups reflecting draft vulnerability, thus

allowing comparisons of the groups across a number of variables. Based on results of these comparisons, certain predictions can be made about the probable composition of the muitary services under zero-dreft conditions.

This study examined differences among four groups of Air Force accessions defined in terms of their draft vulnerability. Subjects with lottery numbers 1 through 122 constituted a high-draft-threat group, those with numbers 123 through 244 a moderate-draft-threat group, and those with numbers 245 through 366 a low-draft-threat group. Subjects who were not yet eligible for the draft when they entered the Air Force comprised a draft non-eligible, or no-threat, group. Draft non-eligibles included enlistees who had not reached their nineteenth birthday by December 31, 1969.

Clearly, draft lottery number is a more objective criterion than has previously been available for defining groups in terms of perceived draft threat; nevertheless, certain limitations are recognized. All subjects used in the analyses had, in fact, entered the Air Force. Moreover, some of the men in the high-threat group may have volunteered in the absence of the draft, and some of the men in the low-threat and no-threat groups may have perceived draft pressure. Information regarding the subjects' attitudes toward military service and their perceptions of draft pressure did not enter into this investigation. Rather, the analyses focused on differentiation of the draftthrea! groups across various dimensions: educational background, race, selection test performance, and geographic area of enlistment. With the assumption that the findings for the low-threat and no threat groups would apply to so-called true volunteers, the data should allow an estimation of certain characteristics of enlistees in a zero-draft force as compared to those of young men who enter the service when inputs are primarily a function of draft calls.

II. METHOD

Data were collected on 32,269 basic trainees who entered the Air Force after January 1, 1970, the implementation date of the Selective Service Lottery System. From data files containing information on the processing and classification of Air



Force enlistees, the Air Training Command provided data on all non-prior-service accessions for January through June 1970. Data on the enlistees included day, month, and year of birth, Armed Forces Qualification Test (AFQT) score, and four Airman Qualifying Examination (AQE) aptitude indexes. In addition, geographic area of enlistment, years of formal education completed, and race were obtained. Draft lottery number was determined from the birth date information.

Initially, the primary intention in this study had been to compare groups of subjects based on lottery number. However, the distributional data indicated that 10,850 cases in the sample, or 34 percent of the total accessions, were 18-year-olds who were not subject to the draft when they enlisted. Therefore, the 18-year-old enlistees were categorized into a group designated as no-threat, or draft non-eligible. The remaining 21,419 cases were categorized into three groups on the basis of draft vulnerability under the current lettery system. The high-draft-threat group included subjects whose numbers were I through 122; the moderate-draft-threat group included those whose numbers were 123 through 244; and the lowdraft-threat group included those whose numbers were 245 through 366. Distributions for the four groups are shown in Table 1.

To compare the four groups on educational background, distributions were computed to indicate percentages for four levels of education: 16 years or more schooling completed, 13 through 15 years, 12 years, and 11 years or less. For the total sample, the draft-threat groups were divided in terms of the racial subgroups Negro and non-Negro. Relative performance on the AQE and the AFQT was compared, first for the lottery sequence groups as a whole, and then for groups defined by racial subgroup membership and geographic region of enlistment. Various comparisons were made in terms of selection test dimensions: AQE aptitude index, AFQT score, and AFQT mental ability category.

III. RESULTS AND DISCUSSION

Accessi-ns by Draft-Vulnerability Category

In an earlier study (Valentine & Vitola, 1970), it was reported that 52 percent of the sample had draft lottery numbers from 1 through 122, while

Table 1. Six-Month Distribution of Air Force Accessions by Draft-Vulnerability Category

Lottery	====	
Sequence	N	Percent
1-122	11,259	35
123-244	6,961	21
245-366	3,199	10
Draft	•	
Non-Eligible ²	1 0 ,350	34
Total	32,269	100

^aEnlistees who had not reached their 19th birthday by December 31, 1969.

18 percent had numbers from 245 through 366. This is approximately a 3-to-1 ratio of enlistments for the high-threat and low-threat groups. Table I shows that about a 2-to-1 ratio between the high-threat and low-threat groups (i.e., 35 percent versus 10 percent) also obtained over the first six months of 1970. The 14 percent distribution of draft non-eligibles can be expected to fluctuate over the year as a function of school year cycle. It was also suggested in the earlier study that draft pressure may play a significant role in motivating Air Force enlistments. The data in the present study are consistent with the earlier findings and appear to support the hypothesis of draft-motivated enlistment.

Accessions by Educational Level

Distributions for years of formal education completed by draft-vulnerability categories are shown in Table 2. The draft-threat groups were similar in some respects, but there was one notable difference. Proportionately fewer Air Force accessions with 13 through 15 years of schooling vere represented in the low-threat group than in the high-threat group (i.e., 5 percent fewer of the lowthreat than of the high-threat group had completed from 13 to 15 years of formal education). As should be expected because of their age, the draft non-eligible group contained almost no cases with education beyond high school graduation; furthermore, this group contained a much larger percentage of high school non-graduates than did the three draft-eligible groups (i.e., 15 percent as compared with 4, 4, and 6 percent).



Table 2. Six-Month Distribution of Air Force Accessions for Various Educational Levels by Draft-Vulnerability Category

		_	N	umber at	nd Percenta	ge for Ed	ucational Le	rei		
Years	Lotte Grou 1-12	P	Lott Gro 123-	up	Lott Gro 245-	up	Dra No Eligi	1.	Al Grou Comb	ips .
Schooling Completed	N	*	N	%	N	*	N	*	N	*
16 or more	847	8	506	7	307	10	0	0	1,660	5
13-15	2,342	21	1,372	20	510	16	207	2	4,431	14
12	7,563	67	4,688	67	2,170	68	9,001	83	23,422	73
11 or less	507	4	395	6	212	6	1,642	15	2,756	8
Total	11,259	100	6,261	100	3,199	100	10,850	10C	32,269	100

Table 3 Six-Month Distribution of Air Force Accessions for Racial Subgroups by Draft-Vulnerability Category

				Number a	nd Percent	ge for R	acial Subgrou	IP.		
Racial	Loite Grou 1-12	Ď	Lot1 Gro 123-2	up	Lott Gro 245	up	Dra No Eligi	1-	Al Gro Comb	u Ps
Subgroup	N	*	11	*	N .	*	N	*	N	%
Negro Non-Negro	1,213 10,046	11 89	911 6,050	13 87	553 . 2,646	.7 83	1,710 9,140	16 84	4,387 27,882	14 86
Total	11,259	130	6,961	100	3,199	100	10,850	100	32,269	100

It is recognized that some seasonal fluctuations in educational levil and aptitude qualifications may occur (Lecanar, 1962; Ford, 1962). The reader should be aware that restriction of the data for this study to the time period of January through June limits the conclusions that can be based upon them.

Accessions by Racial Subgroup

Table 3 presents distributional data on racial subgroup membership for the four draft-threat groups. The racial subgroup proportions for the low-threat and no-threat groups were 83 and 84 percent non-Negro and 17 and 16 percent Negro, as compared with 11 and 13 percent Negro in the other two groups. Although some concern has been expressed over possible racial imbalance in a zero-draft force, The Report of the President's Commission on an All-Volunteer Armed Force (Gates, 1970) concluded that an all-volunteer force of 2.5 million people would have approxi-

mately a 15-percent Negro complement. If it can be assumed that enlistees from the low-threat and no-threat groups in this study are representative of enlistees who could be expected to volunteer under zero-draft conditions, the present findings appear to support the Gates Commission estimate. Moreover, these findings are consistent with the findings of an earlier study of Graft lottery groups (Valentine & Vitola, 1970) in which there was evidence that approximately 18 percent of selfmotivated enlistees were Negroes. In that study, self-motivated enlistees were defined on the basis of low draft vulnerability and an expressed attitude favoring military service either with or without a draft. While data available in the present analysis did not provide for identification of minority groups other than Negro, the earlier study indicated that an additional 8 percent of self-motivated accessions were from minority groups other than Negro.



Selection Test Performance

Table 4 presents comparisons of draftvulnerability groups on AFQT score and AQE aptitude index for the total sample and for the racial subgroups Negro and non-Negro. Because of the large sample sizes, differences between the draft-threat groups in mean performance were statistically significant; however, some of the differences were so small as to be of little practical significance. Among the Negro subsamples, AQE mean differences between the high-threat group and the low-threat group were generally about three centile points; the difference on AFQT was about half this large. Mean scores for the Negro draft non-eligible subgroup generally dropped about one additional centile point below the means for the low-threat group. Thus, while differences between the high-threat and no-threat Negro samples varied within only about four centile points, this difference may be critical in light of the relatively low performance of the Negro subgroup as a whole, and the fact that enlistees most similar to those comprising the no-threat group may form one of the major inputs in a zero-draft force.

Mean AQE scores for the non-Negro high-threat and low-threat groups also differed by about three centile points. Mean performance of the non-Negro group was also considerably higher than that of the Negro samples. For the non-Negro accessions, mean test performance of the draft non-eligible group ranged from 6 to 8 centile points lower than that of the high-threat group. In part, this mean difference probably reflects the higher percentage of high school dropouts and lower percentage of subjects with some college among the draft non-eligible accessions. Nevertheless, the difference is appreciable and suggests a considerable reduction in the average ability level of enlistees who will enter under zero-draft

Table 4. Mean Scores on AFQT and AQE Aptitude Composites for Racip' Subgroups and Total Sample by Draft-Vulnerability Category

				Mean a	nd SD on :	Selection	Measure			
		tery oup 122	Gr	tery oup -244	Lot Gre 245	pup	No	aft on • lible	Gre	NI Dups Dined
Selection Measure	Mean	5 D	Mean	\$D	Mean	5 D	Mean	\$D	Mean	<u>s</u> D
				Negro						
	(N = 1)	,213)	(N =	911)	(N =	553)	(N = 1	1,710)	(N = 4)	4,387)
AFQT Score	34.85	19.69	33.06	18.18	33.13	18.10	32.10	17.10	32.79	18,27
AQE Mechanical	47.46	17.82	46.58	18.34	44.30	18.39	43.54	17.40	45.47	17.99
AQE Admir: tration	47.81	20.75	46.31	20.47	45.18	19.58	44.35	18.84	45.91	19.81
AQE General	52 62	17.66	50.54	18.03	49.58	17.41	48.79	15.91	50.38	17.25
AQE Electronics	47.80	19.31	45.46	19.57	44.28	19.10	43.21	17.93	45.19	18.98
				Non-Neg	70					
	(N = 1)	0,046)	(N = 6	(050,	(N = 2)	2,646)	(N = 5	,140)	(N = 2)	7,882)
AFQT Score	65,65	23.33	64.28	23.88	€2 74	24.56	58.90	23.09	62.77	23.72
AQE Mechanical	66.58	19.99	65.75	20.31	64.48	21.11	60.29	19.40	64.18	20.20
AQE Administration	66.81	21.02	65.66	21.83	63.83	22.52	58.21	20.51	53.63	21.47
AQE General	69.96	18.70	69.03	19.41	67.30	19.93	63.15	18.28	67.36	19.08
AQE Electronics	70.07	20.41	68.84	21.17	67.23	21.66	62.03	20.26	67.04	20.88
				Total San	ple					
	(N = 1)	1,259)	(N = 6	,961)	(N = 3)	,199)	(N = 1	0,850)	(N = 3)	2,269)
AFQT Score	62.17	24.93	60.04	25.54	56.46	26.40	54.58	24.30	58.31	25,29
AQE Mechanical	64.42	20.65	63.17	21.08	60.51	21.98	57.59	20.04	61.42	20.94
AQE Administration	64.67	21.80	63.02	22.66	60.37	23.16	55.98	20.91	61.01	22.13
AQE General	67.96	19.43	66.49	20.30	(3.98	20.71	60.81	18.72	64.81	19.79
AQE Electronics	67.55	21.47	65.68	22.45	63.07	22.97	59.00	21.06	63.83	21.99

conditions. Under the assumptions of this study—that a zero-draft population will have characteristics similar to those of the low-threat and no-threat groups—it would appear that recruitment of airmen to qualify for Air Force specialities which require relatively high aptitudes will be considerably more difficult under zero-draft conditions than is true at the present time.

Table 5 presents distributions of AFQT mental ability categories for the various draft-threat groups within racial subgroups. Table 6 presents cumulative distributions for these same groups on the four AQE aptitude indexes; the score cutoff points used in Table 6 (80 and above, 60 and above, and 40 and above) were selected because they are the most frequently applied aptitude cutoff scores for entry into various technical training courses. These sets of distributions underscore the practical meaning of the mean differences shown in Table 4. Among the Negro samples, only very small percentages, ranging from about 2 to 9 per-

cent, qualified for training courses requiring a minimun aptitude index of 80. Moreover, for the Negro samples, only about half as large a percentage of the draft non-eligible group as of the high-threat group qualified at the 80 level. As draft threat decreased, smaller percentages qualified for the courses with entry score requirements of 60. Moreover, larger percentages of the high-threat Negro sample than of the draft non-eligible sample qualified on the various AQE indexes at the 40, or lowest, input level, indicating that these subjects had more limited assignment options available to them. For the non-Negro samples, similar reductions in percentages of qualified enlistees were apparent across draft-threat extegories.

Implications of these findings for a zero-draft force include possible changes in minimum aptitude requirements for some technical courses and possible modification of training curricula to accommodate lower aptitude personnel.

Table 5. Percentage Distributions of AFQT Mental Ability Categories for Racial Subgroups and Total Sample by Draft-Vulncrability Category

====		===	Percentage of	Racial Group in A	FQT Category	
Mental Ability Category	AFQT Centile Range	Lottery Group 1-122	Lottery Group 123-244	Lottery Group 245-366	Draft Non- Eligible	Groups Combined
			Negro			
		(N = 1,213)	(N = 911)	(N = 553)	(N = 1,710)	(N = 4.387)
	93-100	(11 - 1,210)	0	0	` 0	0
ii	65. 92	10	7	7	5	8
	31. 64	39	41	32	41	39
III IV	10. 30	50	52	51	54	53
			Non-Negr	0		<i>r</i> -
		(N = 10,046)	(N = 6.030)	(N = 2,646)	(N = 9,140)	(N = 27,882)
ı	93-100	11	10	10	5	9
i	65· 92	45	44	39	38	42
111	31- 64	33	34	37	43	37
١٧	10- 30	ίί	12	14	14	12
			Total Sam	ple		
		(N = 11,259)	(N = 6,961)	(N = 3,199)	(N = 10,850)	(N = 32,269)
1	93-100	10	9	9	4	8
ii	65- 92	41	39	34	33	37
111	31. 64	34	35	35	42	37
ΙV	10- 30	15	17	22	21	18



Test Performance Related to Geographic Area of Enlistment

Average test performance was compared within draft-vulnerability groups and racial groups by geographic area of enlistment to anticipate effects of possible changes in the sources of input to a zero-draft force. The geographic areas were designated as follows:

- Area 1. North-Northeast, N = 5,192 (Maine, New Hampshire, Rhode Island, Verniont, Massachusetts, Connecticut, New York, New Jersey)
- Area 2. Middle Atlantic-North Central, N = 6,106 (Delaware, Pennsylvania, Maryland, Virginia, West Virginia, Kentucky, Ohio)
- Area 3. South-Southwest, N = 8,244 (Alabama, Florida, North Carolina, South Carolina, Georgia, Tennessee, Mississippi, Arkansas, New Mexico, Louisiana, Texas, Oklahoma)
- Area 4. Middle West, N = 7,358 (Illinois, Indiana, Michigan, Missouri, Wisconsin, Colorado, Iowa, Kansas, North Dakota, South Dakota, Minnesota, Nebraska, Wyoming)
- Area 5. Far West-Pacific Coast, N = 5,369 (Arizona, California, Idaho, Oregon, Montana, Washington, Nevada, Utah, Alaska, Hawaii)

Table 7 presents mean performance on AQE aptitude composites for the four araft-threat groups further categorized by race and by geographic area of enlistment. For the sample as a whole, disregarding race and draft-threat group, there was evidence of some appreciable differences in average AQE performance among the geographic regions. The maximum mean difference on the AQE aptitude indexes ranged from about 5.5 centile points on the Administrative composite to 8 centile points on the Mechanical composite. Within racial groups, the regional differences, though present, were smaller. This finding probably reflects differing racial mixes within the various regional samples. Data in the present analyses appear to depart somewhat from patterns of regional test performance differences observed in previous years. On the Mechanical, General, and Electronics aptitude composites, subjects from the Middle West (area 4) and the Far West (area 5) regions performed at a higher average level than did subjects from the Northeastern seaboard (area 1), the Middle Altantic states (area 2), and the South and Southwest (area 3). On the Administrative composite, enlistees from the Middle West surpassed those from other regions in mean

performance. Generally, regional differences appeared to be smaller than those which have typically been found in such analyses.

Comparison of draft-threat groups within geographic regions revealed very much the same pattern as that observed for the total sample. There tended to be a small drop in mean aptitude test performance with each successive draft-threat group, with the highest threat group achieving the highest mean. A larger drop in mean performance generally occurred between the low-threat group and the draft non-eligible group. These within-region drops in mean ranged from about 5 to 9 centile points. If the assumptions of this study are tenable, the relatively low level of performance of the low-threat and no-threat groups forecasts an appreciable shift in enlistee quality under zero-draft conditions.

Table 8 presents data on mean AFQT performance within geographic regions for the total sample and for racial groups by draft-threat grouping in a manner analogous to that employed in Table 7 for AQE data. Essentially, the same pattern of differences was apparent as was observed for AQE performance. Those enlistees under highest draft threat generally exhibited the highest mean performance. Mean AFQT performance of the high-threat group and the draft non-eligible group differed by from 5 to 9 centile points.

In a highly competitive recruiting atmosphere, it becomes important to know where particular categories of potential enlistees may be found most abundantly and how many may reasonably be expected to be recruited from these areas. At present, assigned recruiting quotas are directly linked to population density. Table 9 presents percentage distributions tor AFQT mental ability categories separately for racial groups within geographic regions by draft-threat group. The greatest number of Air Force enlistees came from the South-Southwest and Middle West regions (areas 3 and 4). Of all Negro enlistees (N = 4,387), 45 percent (f' = 1,981) came from the South-Southwest region (area 3). Further, 54 percent of the Negro enlistees from this area were within the AFQT Category IV range.

The data for the Middle W. (area 4), the second largest input source, previated a different picture: 45 percent of the Negro existees were classed in AFQT Category IV, compared to the 64 percent for the South-Southwest area. For the non-Negro group for all regional areas, the largest percentage (57 percent) of Category I and Category II personnel and the smallest percentage (9 percent) of Category IV personnel were represented in the Middle West distributions.

Table 6. Percentage Distributions of AQE Apritude Indexes for Racial Subgroups by Draft-Vulnerability Category

Continue						Percentage	If Racial Gro	up in score	Range on AG	Percentage of Recial Group in Score Range on AQE Aptitude Composites	omposites.			
Lottery Lottery Corner Lottery Lotte		*		E, A-N) da	3	Š	Negro Subgr	0up (N=27.5	(28)		Total	Total Sample (N=32,269)	12,269)	
State	AAA	Constant Con	1.1028	Lettery Croup 248-366 (N=663)	Non- Non- Ritelbia (N°1,71C)	Lethery Group 1-122 (N=10,046)	Lottery Group 123-244 (N=6,050)	Lottery Group 245-366 (N=2,646)	Draft Non- Ellyible (N=\$,140)	Lettery Group 1-122 (N=11,259)	Lottery Group 123-244 (N=6,961)	Lottery Group 245-346 (N=3,189)	Draft Flon- Eligible (N=10,850)	All Groups Combined (N=32,269)
5 4 3 2 35 34 32 22 31 30 77 25 21 19 67 65 61 54 62 60 72 71 67 65 91 90 87 89 88 36 31 26 26 68 66 62 54 64 61 70 69 66 66 90 89 88 88 86 9 8 6 6 4 41 41 37 26 38 36 42 39 36 32 77 73 70 64 72 68 42 39 36 37 77 73 72 44 42 28 41 39 82 78 77 79 94 97 99 91 90 89 91 83 8							MECHANIC	>T COMPO	SITE					
2 2 3 4 5 65 61 54 62 60 72 71 67 65 61 54 62 60 7 7 6 4 36 35 32 19 88 36 31 26 4 36 66 62 54 61 70 69 66 66 66 66 62 54 61 9 8 6 4 41 41 37 26 38 86 42 39 36 32 77 73 70 64 72 68 42 39 36 37 77 73 70 64 72 68 82 77 79 94 93 52 92 93 91 82 74 44 42 28 41 39 84 74			•	•	•	ž		£	٤	31	30	7 9	19	5 6
27 25 21 19 67 65 61 54 92 93 72 71 67 65 91 87 89 88 36 31 32 19 33 31 36 31 26 66 63 64 61 36 31 26 89 89 88 88 86 9 8 6 6 6 6 6 6 6 6 6 42 39 36 37 76 73 70 64 72 68 42 39 36 76 77 73 70 64 72 68 82 78 77 79 94 93 91 93 91 82 77 7 5 44 42 28 41 39 23 24 22 19 91 <th>30 & shore</th> <td></td> <td>*</td> <td>•</td> <td>7</td> <td>3</td> <td></td> <td>;</td> <td>1:</td> <td>: :</td> <td>3</td> <td>3</td> <td>40</td> <td>ý</td>	30 & shore		*	•	7	3		;	1:	: :	3	3	40	ý
7 7 6 4 36 32 32 19 33 31 31 31 32 32 33 31 31 31 32 32 32 33 31 31 31 32 31 31 31 31 31 31 32 32 32 32 32 33 31 31 32 32 32 32 32 32 32 32 32 32 32 32 32	50 & above		ង៖	ដូវ	2 7	69	& &		¥ &	7 68 6	8 8	* \$	æ	8 %
7 7 6 4 36 35 32 19 33 31 36 31 26 26 68 66 62 54 64 10 69 66 66 90 89 88 85 88 86 10 69 66 66 90 89 88 85 88 86 11 11 11 37 26 38 36 12 13 36 32 77 73 70 64 72 18 77 79 94 93 52 92 93 91 11 11 12 12 68 11 12 12 12 13 14 15 15 16 88 11 13 15 15 15 15 15 15 15 15 15 15 15 15 15			:	5	3		CMINISTRA	LTIVE COMI	POSITE					
7 7 6 4 36 35 32 19 35 31 75 75 75 75 75 75 75 75 75 75 75 75 75							;		9	÷	÷	č	;	7,
36 31 26 26 99 89 54 57 75 75 75 75 75 75 75 75 75 75 75 75	SO & above		-	۪ڡ	* ;	፠	£,	22	2:	2 2	7.5	9 %	: 5	3 %
70 69 66 66 90 89 88 85 88 86 GENERAL COMPOSITE 9 8 6 4 41 41 37 26 38 36 42 39 36 32 77 73 70 64 72 68 82 78 77 79 94 93 52 92 93 91 ELECTRONICS COMPOSITE 9 7 7 5 44 42 28 41 39 28 24 22 19 72 99 90 91 88	60 A above		31	8	92	3	8	70	ř	\$ 3	3 2	3 6	3 6	
9 8 6 4 41 41 37 26 38 36 42 39 36 32 77 73 70 64 72 68 82 78 77 79 94 93 91 91 ELECTRONICS COMFOSITE 9 7 7 5 44 42 28 41 39 28 24 22 19 73 69 66 59 67 63 28 44 42 28 41 39 88 89 91 88	40 & above		\$	8	જ	8	88	86	88	œ	%	£	78	3
9 8 6 4 41 41 37 26 38 36 36 32 7.5 73 70 64 72 68 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9							GENERA	L COMPOSI	TE					
42 39 36 32 77 73 70 64 72 68 82 78 77 79 94 93 52 92 91 91 ELECTRONICS COMPOSITE 9 7 7 5 45 44 42 28 41 39 28 24 22 19 72 69 65 59 67 63 29 54 54 63 91 90 89 91 88	4		oc	•	4	7	14	37	92	88	36	31	22	35
82 78 77 79 94 93 52 92 93 91 ELECTRONICS COMPOSITE 9 7 7 5 45 44 42 28 41 39 25 24 22 19 72 91 90 89 91 88			ģ	, ,	. 5	3,2	73	5	\$	72	3	\$	28	8
ELECTRONICS COMPOSITE 9 7 7 5 45 44 42 28 41 39 28 24 22 19 72 69 66 59 67 63 71 64 64 61 91 90 89 91 88	Popular de Constitución de Con) (2	35	\$ 2	Z	93	ξĶ	92	93	16	88	88	16
9 7 7 5 45 44 42 28 41 39 28 24 22 19 72 69 66 59 67 63 71 64 63 91 90 89 91 88							ELECTRON	TICS COMPO	SITE					
23 24 22 19 72 69 66 59 67 63 73 64 64 64 91 90 89 91 88	4		•	٠	v	**	44	42	28	4	39	35	5	34
7, 6, 64 65 91 90 89 91 88	200		- ?	٤ -	, 5	3 6	: ?	· 5	65	67	63	28	25	9
	100 a 100 a		\$ 3	13	S	93.	36	8	88	16	88	88	88	88

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Table 7. Mean Scores on AQE Aptitude Composites for Racial Subgroups and Total Group by Enlistment Region and Draft-Vulnerability Category

Region	Lotten 1-1	Group 22	Lotters	Group ·244		Group 366		aft ligible		roups bined
of Enlistment	Mean	5 D	Mean	\$D	Mean	SD	Mean	\$D	Mean	SC
			MECH	ANICAL (COMPOSIT	TE.				
				Negr						
I. North-Northeast	47.69	19.21	48.93	18.17	45.24	19.66	42.50	18.84	46.09	18.5
2. Middle Atlantic-			.0.50	20.21						
North Central	46.79	18.43	45.14	19.44	44.59	19.37	44.01	17.66	45.13	18.
3. South-Southwest	47.37	17.45	45.97	16.93	43.35	17.23	42.69	16.65	44.85	17.
l. Middle West	48.32	17.49	49.03	20.09	46.09	19.96	45.90	16.95	47.34	J8.
. Far West-Pacific										
Coast	46.15	17.21	43.2	20.89	46.81	17.34	45.00	16.50	45.31	17.
				Non-Ne	gro					
. North-Northeast	63.92	21.63	64.27	21.15	61.30	21.62	57.13	19.64	61.66	21.
. Middle Atlantic-										
North Central	65.57	20.20	64.77	20.62	62.82	22.23	58.65	19.26	62.95	20.
S. South-Southwest	64.37	19.45	63 24	20.44	61.01	20.26	58.62	19.20	61.21	19.
. Middle West	70.07	18.98	68.37	19.99	69,28	20.14	63.77	18.63	67.87	19.
. Far West-Pacific										
Coast	68.71	19.33	68.88	18.53	65.63	20.52	63.12	19.39	66.59	19
	•••••			Total Sa	mala					
					-					
. North-Northeast	61.79	21.65	62.29	21.42	59.09	22.05	54.97	20.22	59.20	21
, Middle Atlantic-										
North Central	63.13	20.95	61.77	21.62	58.94	23.02	56.60	19.70	60.12	21
. South-Southwest	61.57	20.28	59.32	20.99	55 <i>5</i> 6	20.97	53.54	19.87	57.94	20
, Middle West	68.64	19.62	66.82	20.67	66.65	21.39	62.03	19.20	65.91	20
Far West-Pacific										
Coast	67.44	19.92	67.84	19.17	64.14	21.01	62.32	19.62	65.37	14
			ADMINI	STRATIV	E COMPO	SITE.				
				Negr	0					
l. North-Northeast 2. Middle Atlantic-	49.09	20.07	46.81	22.19	44.01	20.85	43.73	19.02	45.91	20.
North Central	51.43	19.62	48.79	21.26	46.48	21.25	43.99	18.98	47.67	20.
S. South-Southwest	45.01	20.28	44.78	20.07	44.41	17.52	43.70	18.70	44.48	19
s. Middle West	49.92	20.28	45.91	18.05	46.60	20.76	47.43	19.00	47.47	19
. Far West-Pacific	47.72	20.31	43.71	10.03	40.00	20.10	47.45	1320	77.77	17
Coast	48.54	22.35	51,92	19.76	48.88	22.76	44.76	16.93	48,50	20
COLST	40.54	22.33	31.72			22.70	44.70	10.73	40.20	
				Non-Ne	•					
. North-Northeast	66.92	20.63	66.29	22.21	62.70	22.73	57.11	20.89	63.25	21
l. Middle Atlantic-					_					
North Central	66.91	20.55	65.58	21.29	64.99	22.25	58.98	20.29	64.11	21
. South-Southwest	65.72	21.16	65.45	21.23	63.73	21.63	57.61	19.93	62.20	20.
. Middle West	69.20	20.70	67.59	22.07	66.57	22.30	59.86	20.80	65.81	21
Fut West-Pacific										
Coast	64.07	21.67	62.86	22.16	60.32	23.89	57.09	20.48	62.69	22
				Total Sa	mple					
. North-Northeast	64.95	21.32	63.76	23.17	69.14	23.45	55.13	21.23	60.72	22
. Middle Atlantic-	04.73	21.32	03.70	23.17	07.14	23,43	33.13	21.27	00.72	21
North Central	64.89	21.08	52.99	21.15	61.32	23.24	56.86	20.78	61,29	21.
South-Southwest	62.11	22.45	60.71	22.13	57.64	22.36	53.19	20.78	58.57	22
. Middle West	67.94	21.24	65.83	22.56	64.30	22.30	58.64	20.95	58.57 64.11	21
i. Missoue west i. Far West-Pacific	07.74	21.27	CO.CO	22,30	٠٠.٥٠ ر	44.77	J0.04	20,73	V7.11	41
Coast	63.30	21.93	62.42	22.21	59.36	23.89	\$6.60	20.52	60.33	21
CORN	03.30	41.73	V4.74	44.41	33.30	23.07	20.00	40.04	UV.))	41,

Table 7 (Continued)

Region	Lottery 1-1	Group 22	Lottery 123	Group 244	Lottery 245	Group -366	Or Non-E	aft ligible	All G Com	rouPs bined
of Enlistment	Mean	\$D	Mean	\$D	Mean	\$D	Mean	SD	Misan	\$ D
			GEN	ERAL CO	MPOSITE	<u>:</u>				
				Negr	0					
1. North-Northeast	54.33	17.70	54.20	18.38	52.29	18.64	50.44	15.00	52.82	17.43
2. Middle Atlantic- North Central	56.10	17.92	53.04	18.59	51.28	18.04	50.33	15.91	52.69	17.62
3. South-Southwest	49.92	17.04	47.29	17.28	47.64	16.19	46.40	15.78	47.81	16.5
I. Middle West	54.86	17.48	52.62	17.93	52.18	18.04	51.07	16.08	52.68	17.30
. Far West-Pacific	51.00	27.10								
Coast	50.31	18.41	53.27	14.93	50.11	18.75	49.86	13.02	50.89	16.2
				Non-Ne	erro					
N-at Mastria		10.41	60.63		66.99	19.51	61.84	18.15	67.15	18.8
l. North-Northeast 2. Middle Atlantic-	٤9.93	18.41	69.83	19.38	00.77	17.51	01.04	10.13	07.13	10.0
North Central	70.23	18.38	68.30	19.48	68.03	20.06	63.65	18.26	67.48	18.80
3. South-Southwest	67.52	19.08	67.30	19.53	65.05	19.53	61.59	17.93	65.37	19.0
I. Middle West	72.10	18.30	71.03	19.23	70.63	19.59	64.64	18.39	69.60	18.8
5. Far West-Pacific										
Coast	70.04	18.81	69.12	19.06	65.24	21.07	64.52	18.35	67.23	19.3
				Total Sa	mple					
l. North-Northeast	68.20	18.98	67.80	19.96	64.93	20,09	60.15	18.21	64.93	19.3
Middle Atlantic-										
North Central	68.40	18.92	65.95	20.12	64.91	20.85	61.65	19.40	65.12	19.4
3. South-Southwest	64.48	19.88	62.72	20.83	59.56	20.28	56.76	18.68	61.18	20.0
. Middle West	70.94	18.78	69.53	19.78	68.50	20.29	63.94	18.58	67.93	19.3
Far West-Pacific	/0.33	10.60	60 * 1	10.26	64.74	21.48	63.85	10.46	66.45	19.4
Coast	68.77	19.58	68.53	19.36	04./4	21.40	03.03	18.46	00.43	17.4
			ELECT	RONICS	COMPOSI	<u>te</u>				
				Negr	0					
i. North-Northeast	48.47	21.80	47.89	22.40	45.42	21.96	43.72	20.19	46.37	21.59
2. Middle Atlantic										
North Central	51.32	20.29	47.83	20.39	46.66	19.30	45.15	19.13	47.74	19.7
3. South-Southwest	45.05	17.81	42.77	17.76	42.12	17.23	41.48	16.68	42.87	17.3
l. Middle West 5. Far West-Pacific	50 13	18.73	46.97	19.19	45.19	21.31	44.02	17.56	45.58	19.2
Coast	46.67	18.77	49.23	21.56	42.17	21.16	46.10	16.37	47.79	19.4
CORST	₩0.07	10.77	47.23			21.10	40.10	10.51	47.17	17.4
				Non-Ne	•					
l. North-Northeast	69.36	21.08	68.41	21.87	65.92	21.92	60.00	21.38	65.92	21.5
2. Middle Atlantic-	30.01	10.00	40.00	31.30	/2.10	22.62	£1.03	10.71	46.30	20.8
North Central 3. Sauth-Southwest	70.01	19.99 20.46	68.00 67.05	21.28 21.04	67.19 64.83	22.53 21.05	61.92 60.11	19.72 20.08	66.78 64.94	20.6
I. N. Jdle West	67.76 72.67	19.70	71.26	20.98	71.00	20.92	64.03	19.86	69.74	20.0
S. Far West-Pacific	72.07	19.70	/1.20	20.90	71.00	20.72	04.03	17.00	07.74	.0.5
Coast	70.34	20.48	69.81	20.39	66.54	21.82	64.19	19.94	67.72	20.6
		24		Total Sa						
l Namik Namikasia	67.00	22.14	68.26	23.02	-	22.02	67.60	22.00	62.03	22.7
l. North-Northeast 2. Middle Atlantic-	67.08	22.14	65.76	23.02	63.13	23.03	57.60	22.00	63.03	22.1
North Central	67.58	20.98	64.90	22.35	63.03	23.44	59.55	20.48	63.73	21.6
3. South-Southwest	63.85	20.98	61.49	22.77	57.84	22.60	54.20	20.95	59.70	22.2
4. Middle West	71.21	20.40	69.31	21.85	68.07	22.48	62.17	20.44	67.55	21.2
5. Far West-Pacific										
Coost	69.10	21.10	69.01	20.87	65.33	22.21	63.30	20.16	66.63	20.99

Table 8. Mean Scores on AFQT for Racial Subgroups and Total Sample by Enlistment Region and Draft-Vulnerability Category

			Me	an and SC	on AFQT	for Enlist	ment Reg	ons	_	
Region of		y Group 122		Group -244		/ Group -366		raft Eligible		roups bl ned
Enlistment	Mean	\$D	Mean	50	Mean	SO	Mean	SD	Mean	50
				Negr	0					
	(N =	1,213)	(N =	911)	(N =	553)	(N =	1,710)	(N =	4,387)
1. North-Northeast 2. Middle Atlantic-	36.68	19.11	36.03	18.41	33.26	19.74	32.61	17.43	34.65	18.6
North Central	38.95	22.15	37.05	19.56	35.66	19.86	34.50	18.44	36.54	20.00
3. South-Southwest	31.02	17.89	28.38	15.05	29.56	14.67	26.54	16.57	28.88	16.05
4. Middle West	37.90	19.09	36.20	19.50	33.67	20.41	32.80	17.38	35.14	19.10
5. Far West-Pacific										
Coast	37.77	20.88	46.42	24.72	39.70	24.94	33.17	19.96	39.27	22.63
				Non-Ne	gro					
	(N = 1	0,046)	(N = 6	5,050)	(N = 2	2,646)	(N = 9	9,140)	(N = 2	7,882)
1. North-Northeast 2. Middle Atlantic-	64.03	23.46	62.74	24.60	59.81	24.34	55.30	23.69	60.47	24.02
North Central	65.17	23.28	63.16	23.88	61.51	25.17	58.74	22.44	62.15	23.69
3. South-Southwest	62.86	23.26	61.65	23.79	58.94	24.35	56.55	22.78	60.00	23.55
4. Middle West 5. Far West-Pacific	68.49	22.77	67.06	23.72	66.62	23.97	61.32	22.74	65.87	23.30
Coast	67.88	23.51	67.90	22.54	64.25	24.63	63.29	22.93	65.83	23.40
				Total Sa	mple					
	(N = 1	1,259)	(N = 6	5,961)	(N = 3)	,199)	(N = 1	0,850)	(N = 3	2,269)
1. North-Northeast 2. Middle Atlantic-	61.04	24.56	59.26	25.52	01.62	25.45	52.21	24.05	57.03	24.98
North Central	61.72	24.77	59.14	25.12	55.28	26.36	55.59	23.25	58.48	24.61
3. South-Southwest	57.40	25.41	54.07	26.14	49.08	26.19	47.78	24.32	52.80	25.69
4. Midd's West	66.46	23.77	64.58	24.85	62.86	25.80	58.61	23.72	63.16	24.42
5. Far West-Pacific							/ - Z			
Court	66.11	24.45	66.95	23.17	62.35	25.35	61.85	23.63	64.41	24.07

Note. — For total sample across draft-vulnerability groups and geographic regions:

Mean = 58.31

SD = 25.29



Table 9. Percentage Distributions of AFQT Mental Ability Categories for Racial Subgroup: by Enlistment Region and Draft-Vulnerability Category

Company Company Lectury Company Compan	(45) (N = 70) (10) (10) (10) (10) (10) (10) (10) (1	N = 270) N = 307) N = 307) N = 307	Area I. North-Northeast (N = 671) (N = 153 (N = 671) (N = 153 (N = 47 (N = 879) (N = 1879) (N = 187	Content Group 1-122 1-122 1-122 1-122 1-122 1-122 1-12 1	(N = 971)	Cottary Group Group 245-366	Oraft Non- Cigibie	All Groups Combined
(N = 186) (N = 265) (N = 265) (N = 504) (N = 504) (N = 171) (N = 1711) (N = 17111) (N = 17111) (N = 17111) (N = 17111) (N = 171111) (N = 1711111) (N = 171111111111111111111111111111111111		Au (N = 270) (S = 270) (N = 270) (N = 270) (N = 307) (N = 307) (N = 307) (N = 307)	Contained 1. North-North (N = 671) 0 10 47 43 43 (M = 879) 11 11 44 44	Cartery Group 1-122 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Group Group 123-344 (N = 971) 11 40 35	Cottery Group 245-366	Oraft Non- Cigibie	All Groups Combined
(N=186) (N 55-92 11 10-30 11 10-30 11 (N=265) (N 99-100 11 10-30 (N=504) (N 65-92 6 10-30 61 10-30 61		(N = 270) 8 8 50 42 Ama 2. 1 (N = 307) 10	1. North-North (N = 671) 0 10 47 43 43 43 (N = 879) 11 44 44	(N = 1,539) 10 10 43 35 12 12 (N = 1,809) 10 44 44	(N = 971) 11 40 33			
93-100		(N=270) 8 8 50 42 42 Ama Z. 1 (N=307) (N=307) 48 42	(N = 671) 10 10 47 43 43 (M = 879) 11 44 44	(N = 1,539) 10 10 43 43 43 12 12 12 (N = 1,809) 10 44	(N = 971) 11 40 35 14			
92-100 11 10-30 41 10-30 41 10-30 15 11-30 15 10-30 45 10-30 65 10-30 61 10-30 61 10-30 61		Avea 2. 1	0 47 43 43 (N = 879) 11 44 44	10 43 35 12 12 (N = 1,809) 10 35	:: \$ % 2	(N = 445)	(N = 1,566)	(N = 4,521)
65-25 10-30 10		8 50 50 42 Awa 2. 1 (N = 307) 10 10 48 42	10 47 43 43 48 Atlantic-No (N = 879) 11 44 44	43 35 12 12 (N = 1,809) 10 35	δ X 4	∞	4	∞
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IV. CONCLUSIONS

The purpose of this study was to compare characteristics of four groups of enlistees categorized on the basis of their draft vulnerability under the current Selective Service Lottery System. Draft-vulnerability groups were defined in terms of high, moderate, low, and no threat. An undealying assumption of the study was that characteristics of the low-threat and no-threat groups would apply similarly to personnel who would enlist in the absence of any draft pressure.

It was generally found that the average aptitude test performance of enlistees with successively lower draft threat was moderately lower than that of other enlistees. In most instances, the no-threat group showed a marked drop in aptitude test performance. This was true for the overall sample and for subgroupings based on race and geographic area of enlistment. Thus, under the assumption of similarity between the low-threat and no-threat groups and a zero-draft population, it appears that the manpower resources to fill high-aptitude enlistment quotas might be more limited than is presently the case. It is also suggested that proportionalely fewer enlistees in a zero-draft force will have completed from 13 to 15 years of education. Implications of these findings include possible modification of minimum aptitude requirements for some technical courses and revision of some training curricula to accommodate lower aptitude personnel.

Results of this study further suggest an increase in the proportion, of Negroes in a zero-draft

population. The indications are for an increase in Negro accessions of 4 percent, for a total of about 16 percent, a figure which is compatible with the projections of the Gates Commission in its report on an all-volunteer force. It has been noted, however, that the racial subgroup proportions found in the analyses are somewhat lower than findings from an earlier study (Valentine & Vitola, 1970) which suggested that a so-called volunteer population would include 18 percent Negroes. The experimental groups in that study were defined in terms of expressed attitude toward military service, as well as draft vulnerability.

A number of studies concerned with zero-draft problems are being planned or are in progress. As has been stated, aptitude patterns of Air Force accessions have typically varied as a function of time of enlistment. To determine the stability of trends observed in the present study, data are being compiled on accessions for the entire year of 1970.

Another study in progress concerns the expressed attitude toward military service of 1970 Air Force accessions. These data will also provide a sample for cross-validation of results of the earlier study which used the same criterion.

Additional studies are being planned to explore post-high-school plans of twelfth-grade males through data accumulated in the armed services high school testing program. Indications of potential input to the armed services should be reflected.

REFERENCES

Ford, F.B. A technique for the evaluation of recruiting strategy with fluctuating availability and known demand. PRL-TDR-62-22, AD-294 848. Lackland AFB, Tex.: Personnel Research Laboratory, Aerospace Medical Division, September 1962.

Gates, T.S. (Chairman) The report of the President's commission on an all-volunteer armed force. New York: Macmillan Co., 1970.

Lecznar, W.B. Some aptitude data on Air Force enlisted accessions. PRL-TDR-62-10, AD-289 874. Lackland AFB, Tex.: Personnel Research Laboratory, Aerospace Medical Division, June 1962.

Valentine, L.D., Jr. & Vitola, B.M. Comparison of self-motivated Air Force enlistees with draft-motivated enlistees. AFHRL-TR-70-26, AD-713 608. Lackland AFB, Tex.: Personnel Research Division, Air Force Human Resources Laboratory, July 1970.



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Security Classification	
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	and indexing annotation must be entered when the overall report is classified)
I. QRIGINATING ACTIVITY (Corporate author)	28. REPORT SECURITY CLASSIFICATION
Personnel Division	ab. GROUL
Lackland Air Force Base, Texas 78236	20. 41091
S. REPORT TITLE	
ASSESSMENT OF AIR FORCE ACCESSIONS B	Y DRAFT-VULNERABILITY CATEGORY
4. DESCRIPTIVE NOTES (Type of report and Inclusive da	lea)
5. AUTHORIS? (First name, middle initial, last name)	
Bart M. Vitola Loonie D. Valentine, Jr.	
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6. REPORT DATE	78. TOTAL NO. OF PAGES 75. NO. OF REFS
March 1971	12 4
BO. CONTRACT OR GRANT NO.	98. ORIGINATOR'S REPORT NUMBERISI
b. PROJECT NO.	AFHRL:TR:71:10
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10. DISTRIBUTION STATEMENT	
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11. SUPPLEMENTARY NOTES	12- SPONSORING MILITARY ACTIVITY
	Personnel Division
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ID. ABSTRACT	_

As the Armed Forces move toward a zero-draft force, assessment of the characteristics of current Air Force accessions becomes necessary. While the Air Force has relied upon voluntary enlistments to maintain its force strength, it has been recognized that many young men who enlist are moth ated to do so by the prospect of being drafted. On the basis of draft lottery number, four groups of basic trainees enlisting during the first six months of 1970 were defined in terms of their draft vulnerability at the time of enlistment. These groups, designated as high, moderate, low, and no threat, were compared on a number of dimensions. Compared to the other groups and to the total group, the test performance of the low-threat group was somewhat lower. In addition, there were a gnificant differences between the no-threat group, the other groups, and the total group. In various comparisons on test performance, there were marked differences between racial and enlistment region subgroups, but only moderate differences within draft-threat groups. The data suggest that under zero-draft conditions manpower resources at the higher aptitude levels may be more limited than is presently the case



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